

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. **(Currently Amended)** An isolated active fragment of an MEKK1 protein consisting of an amino acid sequence having at least ~~75% homology~~ 95% identity to an amino acid sequence consisting of about amino acids 875-1493 of SEQ ID NO:3 ~~Figure 9~~, wherein said active fragment mediates apoptosis.

2-6. **(Canceled)**

7. **(Currently Amended)** The active fragment of claim 1, which consists of about amino acids 875-1493 of SEQ ID NO:3 ~~Figure 9~~.

8. **(Currently Amended)** ~~A~~ An isolated polypeptide comprising an amino acid sequence a kinase catalytic domain comprising a sequence selected from the group consisting of: the amino acid sequence set forth as SEQ ID NO:3 residues from about 409 to about 672 of MEKK 1.1; amino acids from about 1331 to about 1594 of MEKK 1.2; a polypeptide at least 85% identical to amino acid residues 409 to about 672 of MEKK 1.1; and an amino acid sequence polypeptide at least 85% 95% identical to said sequence amino acid residues 1331 to about 1594 of MEKK 1.2.

9. **(Currently Amended)** An isolated protease-resistant MEKK1 protein comprising an amino acid sequence having at least 95% identity ~~75% homology~~ to the amino acid sequence ~~of Figure 9 set forth as SEQ ID NO:3~~, wherein at least one amino acid equivalent to amino acids 871-874 of ~~Figure 9~~ SEQ ID NO:3 is substituted such that the MEKK1 protein is resistant to proteolysis by a caspase after amino acid 874.

10. **(Currently Amended)** The MEKK1 protein of claim 9, wherein at least one amino acid equivalent to amino acids 871-874 of ~~Figure 9~~ SEQ ID NO:3 is substituted with an alanine residue.

11. **(Currently Amended)** The MEKK1 protein of claim 9, wherein each amino acid equivalent to amino acids 871-874 of ~~Figure 9~~ SEQ ID NO:3 is substituted with an alanine residue.

12-13. **(Canceled)**

14. **(Currently Amended)** The MEKK1 protein of claim 9, ~~which is a mouse MEKK1 protein~~ comprising the amino acid sequence of SEQ ID NO:3, but for the substituted amino acids.

15-34. **(Canceled)**

35. **(Original)** A method of stimulating apoptosis in a cell comprising introducing into the cell an expression vector encoding the MEKK1 active fragment of claim 1 such that MEKK1 active fragment is produced in the cell and apoptosis is stimulated.

36. **(Original)** A method of inhibiting apoptosis in a cell comprising introducing into the cell an expression vector encoding the protease-resistant MEKK1 protein of claim 9 such that protease-resistant MEKK1 protein is produced in the cell and apoptosis is inhibited.

37. **(Original)** A method of generating an MEKK1 active fragment *in vitro*, comprising: contacting an MEKK1 protein *in vitro* with a caspase protease under proteolysis conditions; and allowing the caspase protease to cleave the MEKK1 protein such that an MEKK1 active fragment is generated.

38. **(Currently Amended)** A method of identifying a compound that modulates the apoptotic activity of an MEKK1 active fragment, comprising:
providing an indicator cell that comprises the MEKK1 active fragment of claim 1;
contacting the indicator cell with a test compound; and
~~determining~~ determining the effect of the test compound on the apoptotic activity of the MEKK1 active fragment in the indicator cell to thereby identify a compound that modulates the apoptotic activity of the MEKK1 active fragment.

39-40. **(Canceled)**